

REMARKS/ARGUMENTS

Claims 33-66 were previously pending in the application. Claims 33, 35-36, 38, 43-44, 46-47, 49, 51-52, 54, 59-60, and 62-63 are amended, and new claims 67-68 are added herein. Assuming entry of this amendment, claims 33-68 are now pending in this application. The Applicant hereby requests further examination and reconsideration of the application in view of the foregoing amendments and these remarks.

35 U.S.C. §112 Rejections

In pages 2-3 of the August 18, 2009, Office Action, the Examiner rejected claims 47 and 63 under 35 U.S.C. §112, first paragraph, for allegedly failing to comply with the written description requirement by supposedly containing matter not supported by the specification. Specifically, the Examiner stated that the Specification does not contain the term “variable timing intervals.” In response, the Applicant has amended claims 47 and 63 to more closely match the language of the Specification, *e.g.*, at page 12, lines 16-18. The Applicant submits that, therefore, the §112 rejection has been overcome and should be withdrawn. These amendments were not made to overcome any prior-art rejections.

Miscellaneous Amendments to the Claims

Claims 46 and 62 have been amended to remove an inadvertent redundancy of the article “the” resulting from the previous amendment. Claim 49 has been amended to clarify that the claimed method is implemented by a network device for a communication network. This amendment was made to ensure that the claim is directed to statutory subject matter and is supported by previously pending claim 49. These amendments were not made to overcome any prior-art rejections.

Prior-Art Rejections

In pages 3-7 of the Office Action, the Examiner rejected claims 33-37, 41-42, 45, 48-53, 57-58, 61, and 64 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,853,681 to Lindoff (“Lindoff”) in view of U.S. Pat. App. Pub. No. 2002/0131486 to Haartsen (“Haartsen”). In pages 7-10, the Examiner rejected claims 38-40, 43-44, 54-56, and 59-60 under

35 U.S.C. §103(a) as being unpatentable over Lindoff in view of Haartsen in further view of U.S. Pat. No. 6,925,105 to Partyka (“Partyka”). In pages 10-11, the Examiner rejected claims 46, 62, and 65-66 under 35 U.S.C. § 103(a) as being unpatentable over Lindoff in view of Haartsen in further view of U.S. Pat. No. 6,421,527 to DeMartin et al. (“DeMartin”). For the reasons outlined below, the Applicant submits that all of the currently pending claims are allowable over the cited references.

Claims 33 and 49

Claims 33 and 49 have been amended to incorporate the feature that the first data packet comprises a training preamble in addition to a header and a payload and to clarify that (1) the first auxiliary coding is different from the training preamble and (2) the first identifier is different from the training preamble. The amendments are supported at least by previously pending claim 35 and the originally submitted drawings at Figs. 3-6. Note that claims 35-36 and 51-52, which depend from claims 33 and 49, respectively, have been amended to remove their now-redundant feature that the first data packet further comprises a training preamble.

In rejecting previously pending claim 33, the Examiner asserted that the combination of Lindoff and Haartsen discloses all the features of that claim. The Applicant submits that the suggested combination of Lindoff and Haartsen is improper and that, regardless, the proposed combination would not teach all the features of amended claim 33.

Proposed Combination Is Improper

The Examiner asserted that it would have been obvious “to incorporate the concept of sending auxiliary coding from a transmitter to a receiver which identifies a [*sic*] identifier used for select [*sic*] specific parameters at a receiver, as disclosed by Haartsen into the method of configuring a receiver with the selected parameter set to receive data transmissions, as disclosed by Lindoff in order to efficiently use resources in the system and properly and correctly configure the receiver which is optimized and tailored for a particular training sequence.” The Applicant submits that combining the teachings of Lindoff and Haartsen would not be obvious.

Lindoff teaches having a control unit that “selects a detection parameter set from a detection parameter table on the basis of the known training sequence” and “configures the receiver to receive the data transmission using the selected detection parameter set” (Lindoff, col. 3, lines 33-38). Haartsen teaches a system where the header of a transmitted packet contains “at least one flag to identify a corresponding reference training sequence to be selected by the

receiver” (Haartsen, Abstract). Combining Lindoff with Haartsen would, therefore, apparently result in a system where a data packet comprises a flag that identifies a training sequence to be used by the receiver and, based on the identified training signal, a controller would select a corresponding detection parameter.

The Examiner provided no rationale for how such a system, which would use training sequences as essentially superfluous correlation intermediaries, would improve the efficiency of any system or would be obvious to make. The Applicant submits that creating such a combination with superfluous intermediaries would, instead, be *prima facie* inefficient and, therefore, not obvious. As a result, the Applicant submits that the proposed combination would not be made by a person of ordinary skill in the art and is, therefore, improper.

Proposed Combination Would Not Teach All Requisite Features

Assuming *arguendo* that the proposed combination is proper and that the flag of Haartsen corresponds to the auxiliary coding of claim 33, which the Applicant does not admit, the proposed combination would, nevertheless, still not teach all the elements of amended claim 33. In particular, the combination would not teach a first auxiliary coding that identifies a first identifier wherein the first identifier is different from the training preamble. As already noted above, Haartsen’s flag identifies a training sequence. It would be impossible for a single first auxiliary coding to identify both (1) a training sequence and (2) something different from the training sequence. Thus, it cannot be said that the proposed combination of cited references would teach all the requisite features of amended claim 33.

Therefore, for the above reasons, it is submitted that claim 33 is allowable over the cited references. For similar reasons it is submitted that claim 49 is also allowable over the cited references. Since claims 34-48, 65, and 67 depend variously from claim 33 and claims 50-64 and 66 depend variously from claim 49, it is further submitted that those claims are also allowable over the cited references.

Claims 34 and 50

In rejecting claim 34, the Examiner asserted that the proposed combination of Lindoff and Haartsen teaches all the features of claim 34. However, the Examiner failed to particularly address claim 34’s requisite feature that “the communication network is a HomePNA network.” For this reason alone, the rejection of claim 34 is improper. In addition, however, the proposed

combination of Lindoff and Haartsen does not and, in fact, could not teach this requisite feature of claim 34.

As described in the Specification, a HomePNA network is a home network that utilizes existing phone links within a home to interconnect various electronic components throughout the home (*see, e.g.*, Specification at pages 1-2). Neither Lindoff nor Haartsen says anything about home networks, let alone HomePNA networks. As a result, neither Lindoff nor Haartsen could teach anything about HomePNA networks. Consequently, it cannot be said that the cited references teach this requisite element of claim 34.

Therefore, the Applicant submits that this provides further grounds for the allowability of claim 34 over the cited references. For similar reasons, it is also submitted that this provides further grounds for the allowability of claim 50 over the cited references.

Claims 38 and 54

Claims 38 and 54 have been amended so that the features of the second data packet of claims 38 and 54 better parallel the features of the first data packet of amended claims 33 and 49, respectively. In rejecting previously pending claim 38, the Examiner asserted that the proposed combination of Lindoff, Haartsen, and Partyka would disclose all the features of claim 38, including that the network device comprises a second transmitter adapted to generate a second auxiliary coding for transmittal with the second data packet. The Applicant submits that the proposed combination of cited references would not teach all the features of amended claim 38.

The Applicant submits that the proposed combination teaches away from the features of claim 38. Partyka teaches a “receiver [that] identifies each source of transmission based on its unique variations of the transmission and frequency, thus eliminating the necessity to include any information about the transmitter ID code in the transmitted messages” (Partyka Abstract; emphasis added). In other words, Partyka teaches a system where an identifier for a transmitter is not included in data packets from the transmitter since no such identifier is needed. Consequently, the proposed combination of Lindoff, Haartsen, and Partyka would not comprise a second identifier that identifies the second transmitter.

In addition, the proposed combination does not teach all the features of claim 38. The network device of claim 38 comprises (a) a receiver adapted to receive the first data packet from a first transmitter and (b) a second transmitter adapted to generate and transmit the second auxiliary coding and the second data packet to a second network device. In other words, the

network device of claim 38 comprises a receiver and a transmitter, where the transmitter is adapted to transmit substantially the same kind of data packet and auxiliary coding as the receiver is adapted to receive. The Examiner's prolix verbiage about multi-processors and pluralities of transmitters and receivers discussed in the cited references are irrelevant to this feature. The Examiner did not cite any support for the allegation that Lindoff, Haartsen, or Partyka teach any single device having both a receiver and a transmitter, where the transmitter is adapted to generate and transmit substantially the same kind of data packet and auxiliary coding as the receiver is adapted to receive, let alone the particular kind of data packet and auxiliary coding claimed in claim 38. Consequently, it cannot be said that the cited references teach all the requisite features of claim 38.

Therefore, the Applicant submits that the above reasons provide further grounds for the allowability of claim 38 over the cited references. For similar reasons, it is submitted that this provides further grounds for the allowability of claim 54 over the cited references. Since claims 39-40 depend from claim 38 and claims 55-56 depend from claim 54, it is submitted that this also provides further grounds for the allowability of those claims.

Claims 40 and 56

In rejecting claim 40, the Examiner asserted that the proposed combination of Lindoff, Haartsen, and Partyka would disclose all of the requisite features of claim 40, including that "the second transmitter comprises a first RF front end and a second RF front end" and "the second transmitter is adapted to transmit the second data packet using the second RF front end." The Applicant submits that the cited references do not teach these features.

Significantly, the Examiner did not assert that any of the cited references teach a network device with a first and a second RF front end. It should be noted that none of the cited references of the proposed combination even mention the term "front end," let alone teach devices having and using two front ends.

The Examiner did assert that, because Haartsen's Fig. 3 shows a transmitter and a receiver, "It should thus be obvious to transmit the auxiliary coding with the same RF front end or a different RF front end from said data packet, as it is well known in the art that transmitters/receivers incorporate RF front ends for efficient data transmissions" and "transmitting of auxiliary coding through a specified RF front end is simply a systems parameter of the transmission system and its components." First, the bald implication that, by their very

nature, transmitters/receivers have multiple RF front ends is unsupported. Second, denigrating a requisite feature as “simply a systems parameter,” does not actually show where the prior art allegedly teaches that requisite feature. In other words, no support is provided for the assertion that the cited references teach a device having and using multiple RF front ends. Consequently, it cannot be said that the cited references teach this requisite feature of claim 40.

Therefore, the Applicant submits that the above reasons provide further grounds for the allowability of claim 40 over the cited references. For similar reasons, it is submitted that this also provides further grounds for the allowability of claim 56 over the cited references.

Claims 43 and 59

Claims 43 and 59 have been amended to clarify that the first identifier is a station identifier that uniquely identifies the first transmitter within the communication network. This amendment is supported by at least the originally filed Specification at page 11, lines 12-17.

In rejecting previously pending claim 43, the Examiner asserted that the proposed combination of Lindoff, Haartsen, and Partyka would disclose all the features of previously pending claim 43. The Applicant submits that the proposed combination would not disclose all the features of amended claim 43.

Significantly, the Examiner did not allege that all the features of previously pending claim 43 are actually found in the proposed combination of the cited references. Rather, the Examiner asserted that “[i]t would have been further obvious to a person skilled in the art to incorporate the concept of having an identifier (such as source address/local address) for the transmitter be included in packet for pre-training lookup of a reference training sequence (station ID parameter is used to perform a table look-up to determine training values) in order to correctly and successfully equalize a receiver to the correct transmitter.” The Applicant submits that this bald assertion is unsupported by the cited references and contradicts the Examiner’s rejections of other claims.

As noted above, in rejecting previously pending claim 33, the Examiner asserted that the first identifier of claim 33 corresponds to the training sequences of the cited references. However, (1) neither Lindoff nor Haartsen teach training sequence that uniquely identify their transmitter and (2) Partyka does not disclose anything regarding training sequences. The Examiner’s assertion here that first identifier corresponds to a source address or local address contradicts the Examiner’s earlier assertion that the identifier corresponds to a training sequence.

A training sequence is not equivalent to a source address or local address. In other words, the cited references do not disclose a first identifier that uniquely identifies the first transmitter within the communication network. Consequently, it cannot be said that the cited references teach this requisite feature of claim 43.

Therefore, the Applicant submits that this provides further grounds for the allowability of claim 43 over the cited references. For similar reasons, it is submitted that this provides further grounds for the allowability of claim 59 over the cited references. Since claim 44 depends from claim 43 and claim 60 depends from claim 59, it is further submitted that this also provides further grounds for the allowability of those claims.

Claims 44 and 60

Claim 44 has been amended to depend from claim 43 rather than claim 33 in order to better define the features of the first identifier of claim 44. Similarly, claim 60 has been amended to depend from claim 59. In rejecting previously pending claim 44, the Examiner asserted that the proposed combination of Lindoff, Haartsen, and Partyka would disclose all the limitations of claim 44. The Applicant submits that the proposed combination would not disclose all the features of amended claim 44.

Significantly, the Examiner did not allege that all the features of previously pending claim 44 are actually found in the proposed combination of the cited references. Rather, the Examiner asserted that it “would have been obvious ... to incorporate the concept of having an identifier (such as source address/local address) ... as well as having the first identifier being not the same as the source address, as this is simply a network parameter in how a system would want to identify parameters, either through the station identifier or through a [*sic*] identifier different from the source address.” The Applicant notes that the Examiner appears to suggest that it would be obvious to have an identifier that is simultaneously both (1) a source address and (2) different from the source address. This impossibility suggests that the rejection is improper and should be withdrawn.

The Applicant further notes that the Examiner failed to provide any rationale for the proposed combination to have data packets with both (1) a header including a source address for the first transmitter and (2) a first identifier that both (a) uniquely identifies the first transmitter within the communication network and (b) is not the same as the source address for the first transmitter. The Applicant submits that the proposed combination not only has no such data

packets, but would also not have any reason to have such data packets. Consequently, it cannot be said that the cited references teach all the requisite features of amended claim 44.

Therefore, the Applicant submits that this provides further grounds for the allowability of claim 44 over the cited references. For similar reasons, the Applicant submits that this also provides further grounds for the allowability of claim 60 over the cited references.

Claims 47 and 63

As noted above, claims 47 and 63 were amended to overcome the Examiner's §112 rejection. The Examiner did not allege that the cited references, alone or in combination, disclose the features of previously pending claim 47. The Applicant submits that the cited references do not teach the network device of claim 33 where (1) "the first auxiliary coding is received as a first set of pulses received substantially immediately before the first data packet," and "the first identifier is encoded in the first set of pulses by varying timing intervals between adjacent pulses in the first set of pulses." Consequently, it cannot be said that the cited references teach all the features of claim 47.

Therefore, the Applicant submits that this provides further grounds for the allowability of amended claim 47 over the cited references. For similar reasons, it is submitted that this also provides further grounds for the allowability of amended claim 63 over the cited references.

Claim 67

New claim 67 is directed to the network device of claim 33, where (1) "the training preamble is independent of the first auxiliary coding," and (2) "the training preamble is independent of the first identifier." New claim 67 is supported by the originally filed drawings at Figs. 4-7 and the Specification at page 11, line 25 – page 14, line 2.

As noted above in reference to claim 33, the Examiner's proposed combinations involving Lindoff and Haartsen would correlate the training preamble to at least Haartsen's flag, which the Examiner alleged corresponds to the claimed auxiliary coding and/or first identifier. As a result, it could not be said that the proposed combination could have a training preamble that is independent of both (1) the first auxiliary coding and (2) the first identifier. Consequently, it cannot be said that the cited references teach these requisite elements of new claim 67.

Therefore, the Applicant submits that this provides further grounds for the allowability of claim 67 over the cited references.

Claim 68

New claim 68 is equivalent to previously pending claim 34, written in independent form with all the limitations of the base claim. Note that feature descriptions have been rearranged for improved readability. For at least some of the same reasons articulated above in reference to claim 34, the Applicant submits that new claim 68 is allowable over the cited references. The Applicant further submits that, if the next office action provides new grounds for the rejection of claim 68, then that office action could not properly be made final.

Conclusion

In view of the above amendments and remarks, the Applicant believes that the now-pending claims are in condition for allowance. Therefore, the Applicant believes that the entire application is now in condition for allowance, and early and favorable action is respectfully solicited.

Fees

During the pendency of this application, the Commissioner for Patents is hereby authorized to charge payment of any filing fees for presentation of extra claims under 37 CFR 1.16 and any patent application processing fees under 37 CFR 1.17 or credit any overpayment to **Mendelsohn, Drucker, & Associates, P.C. Deposit Account No. 50-0782.**

The Commissioner for Patents is hereby authorized to treat any concurrent or future reply, requiring a petition for extension of time under 37 CFR § 1.136 for its timely submission, as incorporating a petition for extension of time for the appropriate length of time if not submitted with the reply.

Respectfully submitted,

Date: 12 – NOV – 2009
Customer No. 46900
Mendelsohn, Drucker, & Associates, P.C.
1500 John F. Kennedy Blvd., Suite 405
Philadelphia, Pennsylvania 19102

/Edward J. Meisarosh/
Edward J. Meisarosh
Registration No. 57,463
Attorney for Applicant
(215) 599-3639 (phone)
(215) 557-8477 (fax)